

AeroInfo : a WorldWide Web Virtual Library for Aerospace Sciences *

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Abstract:

The Internet and Intranet, particularly WWW facilitate the world community to get the information they need exhaustively, expeditiously and easily, regardless of its physical location. The flexibility and interactive nature of WWW facilitates the information to be tailor made to suit its target audience. Web designing is an art of contents planning, content organization and providing suitable layout design and effective search engine. Planning and building a Website requires expertise in Web technologies, understanding the power of Web as a medium, Internet resources available and Web advertising. Besides this, one needs to analyse the results, validate links provided, observe the effects of changes to contents, organization and navigation and finally refine and constantly maintain the Website.

Keeping this in mind ICAST has provided a number of approaches for searching information through its newly launched Website 'AeroInfo', a WWW Virtual Library for Aerospace Science and Technology. The contents planning and organization of this site is unique in the sense that the visitors can search information by Source Type, Document Type and Subject Categories.

While the thrust is for sources on Aerospace the site has provided thousands of links to the sites covering Physical, Chemical and Engineering Sciences, Indian and Worldwide Academic and R & D information. Being a new site Virtual Library updation is done very often and improvement upon the contents organization for facilitating better information retrieval intended.

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1-3 March 2000.

1.0 Introduction:

National Aerospace Laboratories (NAL), a constituent of Council of Scientific and Industrial Research (CSIR), is India's pre-eminent civil R&D establishment in aeronautics and allied disciplines. NAL was set up at Delhi in 1959 and moved to Bangalore in 1960. NAL's primary objective, as articulated in its new Vision Statement, is the "development of aerospace technologies with a strong science content and with a view to their practical application to the design and construction of flight vehicles". NAL is also required "to use its aerospace technology base for general industrial applications".

The NAL Library and Information Centre (ICAST) was established in the year 1959. The ICAST caters to the information requirements of the Indian aerospace community in particular and the engineering and technical personnel in general. ICAST is well known for its aerospace collections of books, journals and specifically technical reports from NASA, DLR, ONERA, NLR, ARL and UTIAS. The library has been recognized as the National Information Centre for Aerospace Science and Technology (ICAST) in 1975 by the National Information System for Science and Technology (NISSAT/ DSIR), UNESCO and AR&DB. The centre offers Online, CD-ROM Internet/Intranet based literature search services and is equipped with necessary infrastructure and trained manpower.

2.0 ICAST Mission Statement

Collection, organisation and retrieval of documents and acting as repository centre in the field of aerospace and related areas for providing specialized information services using various sources of information in electronic/print media and adopting developments in Information Technology for making services much more effective, exhaustive, dynamic and almost instantaneous.

3.0 AeroInfo

ICAST has launched a Web Site " AeroInfo: A WWW Virtual Library for Aerospace Science and Technology. Apart from providing details about ICAST and its services, this site serves as one window information search facility for Aerospace. The unique feature of this site is its contents organisation i.e. one can search information by documents types such as reports, standards, patents, etc. ICAST takes care in updating the site very often and checking the validity of links provided.

3.1 CONTENTS OF WEBSITE

3.11 AEROSPACE INFORMATION

As mentioned, the contents planning and organization has been carried out in different steps providing innumerable links:

- ***By Aerospace Subject Categories***

The broad area of Aerospace has been classified in depth using NASA's subject index (01-99 categories) which features other related disciplines of Science and Technology (See the Appendix-I)

- ***By Document Type***

Various relevant sites in Document Types in Aerospace have been provided links to facilitate research work. (See Appendix – II)

One can search bibliographic/full text databases of documents especially technical reports held by NASA and other centers. US and few other country patents could be searched and even full text in some cases. Aerospace community can get into sites of many standards organizations. One can consult Aviation BD, NASA, Thesaurus, etc.

- ***By Source Type***

Links to Different source types like aerospace agencies, organizations, corporations, virtual libraries have been provided which has been listed out in Appendix – III

Sites maintained various worldwide aerospace agencies including NASA are gold mines for information searchers: various virtual libraries and indexes provides links to innumerable number of aerospace related sites.

- ***Online Journals and Magazines in Aerospace***

Links to the sites of about 200 Journal/Magazines titles by various publishers. Some of them apart from giving publishers address, information to author and contents, also provide access to full text articles. Efforts an to give links to many more titles.

3.12 INFORMATION ON OTHER DISCIPLINES

- ***Subjects Covered***

Links have been provided to sources of various kinds of information and have been graphed under various S & T disciplines like Physics, Chemistry, Composites, Material Science, Computer Science, Earth & Atmospheric Sciences, Mechanical Engineering, Mathematics, Oceanography, Surface Engineering, Wind Energy, etc.

- ***Online Journals***

Efforts has been made to identify thousands of journals having their own web pages, may be as a part of their publisher under various disciplines includes Physical, Chemical, Engineering and other sciences.

3.13 R & D AND ACADEMIC INSTITUTIONS

The Indian institutions covered include: CSIR, DRDO, DOD, ICAR, IITs, Universities etc. Basic information about all CSIR, ISRO and DRDO laboratories has been provided on our site along with links to individual sites if available. Few institutions have put up their sites as a part of NIC site and few others like IIT have their own web sites. While there is a lot of scope to improve the contents of pages covering institutions worldwide, attempt has been made give links to select few from US and other countries.

3.14 GENERAL INFORMATION

Hyperlinks to various sources of information on Government, Libraries, News Papers, Dictionaries, Travel, Sports, etc. Newspapers have been segregated in to English and regional languages. We intend to widen the scope of this page and give links under various categories of general interest.

3.15 ESPECIALLY FOR LIBRARIANS

L & IS professionals can look for information regarding Associations, forthcoming Conferences, Databases, Journals, Schools, Library Networks, News Groups, etc. meant for professional matters and sources information required for day to day library activities for providing effective information services.

3.16 ICAST INFORMATION

Coming down to our own information center, the following details have been provided:

- Library membership, document collection, shelf arrangement of books, working hours, library staff, list of journals subscribed by ICAST with hyperlinks to publishers sites if available.
- Services including Document Circulation, Xerox, Translation, Information, etc. along with direct e-mailing facility to the concerned in service matters.
- Search Library Catalogue (OPAC) and know the availability of books, their issue status and on-line reservation of documents, etc.
- List of Additions to ICAST
 - CABA-Combined Aerospace Books Additions, a monthly.
 - CARA-Combined Aerospace Reports Additions, a monthly.
 - Journals-Recent Arrivals, fortnightly.

3.17 UNION CATALOGUE OF BANGALORE SCIENCE LIBRARIES

This page gives access to union Catalogue of Books, Reports, etc held by libraries of IISc, NAL&RRI and current journals being subscribed by about 20 Bangalore libraries. This site is hosted by NCSI/IISc server. This is an experimental project where one can search books by author, title, keywords, etc. using many of the search engines MG,

WAIS and ISIS. One can know journal titles subscribed by a particular library or availability of a particular title.

4.0 SPECIALISED SERVICES OFFERED THROUGH ICAST WEBSITE

- Access to select list of Full-Text Journals available on Internet.
- Journals Contents page service (Subscribed by ICAST).
- Journal Contents downloading from publishers sites.
- Web Alert Service - by identifying important sites relevant to NAL scientists
- Access to International Databases - by subscribing to IDS/Cambridge Scientific Abstracts (as a consortia approach with other leading aerospace organisations) for Aerospace and Material Science Databases simultaneously.
- Links have been provided for accessing Full Text electronic journals either freely available on the net or via subscription.
- More than 300 S&T journals content have been put up on the site for browsing. An e-mail based service for the journals contents is being provided to NAL users.
- For some relevant journals (not subscribed by NAL) of interest to NAL scientists, hyperlinks have been provided for downloading.
- Through AeroInfo – Web Alert Service, a Current Awareness Service is extended to NAL staff by identifying and linking to important and relevant sites.

5.0 MAINTANENCE AND UPDATION

The site is being continuously updated by visiting the existing and new sites. Latest information regarding the current awareness service is being provided. Users suggestion for further improvement is being taken care of. More worldwide information coverage is being thought of.

6.0 WHAT YOU SHOULD DO TO ACCESS ‘AeroInfo’.

Access URL

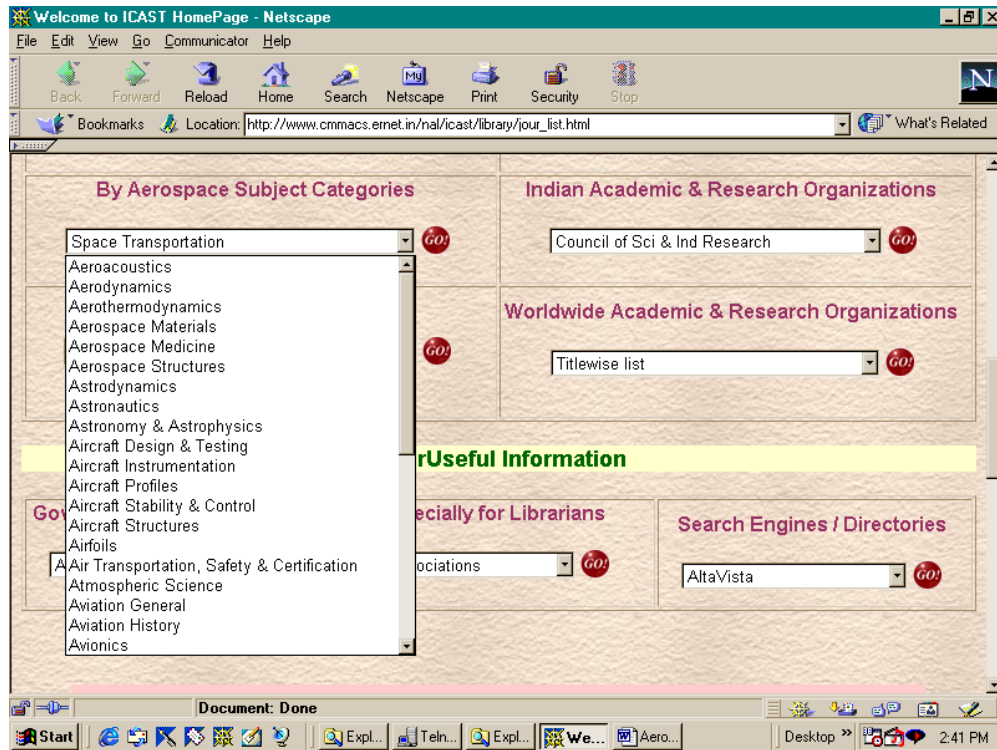
<http://www.cmmacs.ernet.in/nal/icast/> - for Internet

<http://192.168.6.60/icast/> - for NAL Intranet

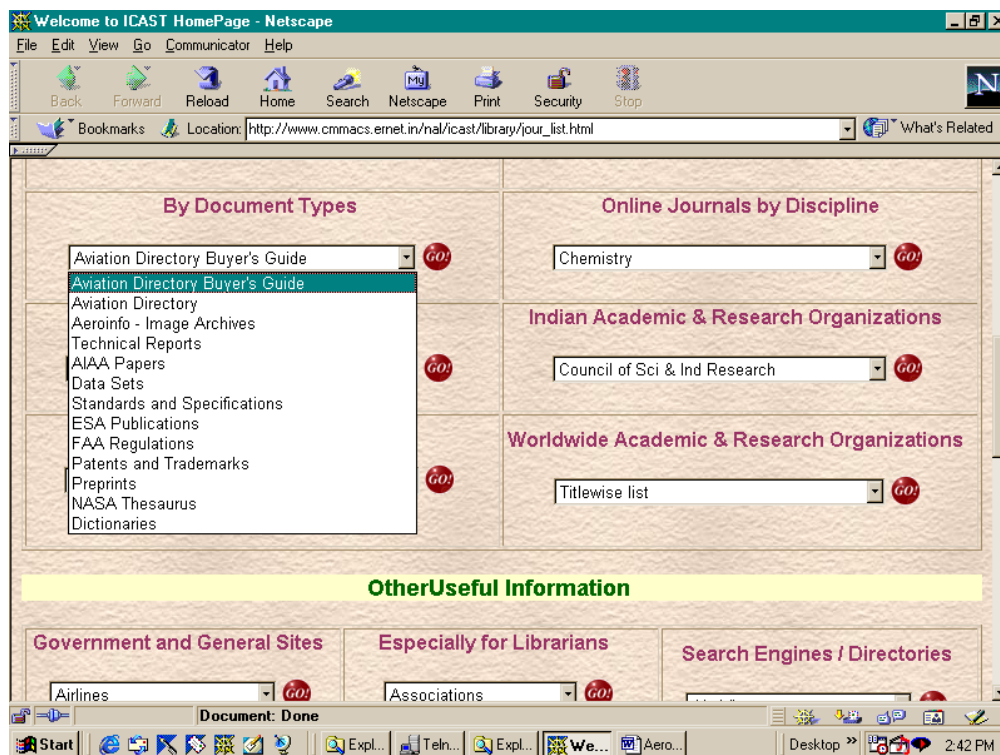
6.0 CONCLUSION:

Electronic information sources are the prime attraction of readers in today’s networked environment. AeroInfo catering to the needs of Aerospace users’ community to the hilt is intended to emerge as the first of its kind of virtual Library in the country. Continuous efforts are being made to update the site with more links with a view to provide information electronically to the maximum in the coming future.

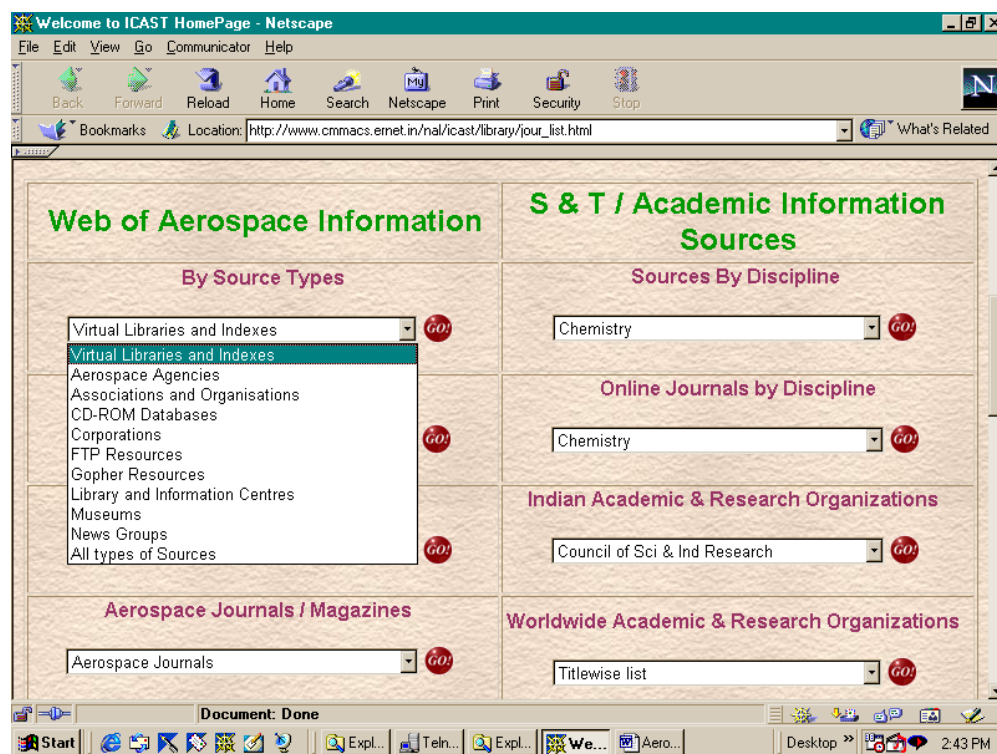
Appendix – I



Appendix II




Appendix III




Welcome to ICAST HomePage - Netscape

File Edit View Go Communicator Help

Bookmarks Location: <http://192.168.6.60/icast/> What's Related



AeroInfo



Explore the Web of Aerospace Information "AeroInfo", the Website of [ICAST](#), [NAL](#), India: Aerospace, Aeronautics, Aviation, Aerodynamics, CFD, Avionics, Composites, Mechanical Engineering, Physics, Materials Science, Computer Science, Chemistry, Surface Engineering; [NASA](#), [ESA](#), [DLR](#), [ISRO](#), [FAA](#); Worldwide Aerospace Agencies; [CSIR](#) - India, [DRDO](#); [AIAA](#) Papers, Journals, Technical reports, Standards, Patents and many more.

What's New
[Access to Full Text Journals](#) | [Access to IJST/ICSA Databases](#)
[Journals Contents](#) | [Union Catalog of ISC, HAL & RRI](#)
[New! Clickmap Service](#)

Web of Aerospace Information	S & T / Academic Information Sources
<p>By Source Types</p> <p><input type="text" value="Virtual Libraries and Indexes"/> GO</p>	<p>Sources By Discipline</p> <p><input type="text" value="Chemistry"/> GO</p>
<p>By Document Types</p> <p><input type="text" value="Aviation Directory Buyer's Guide"/> GO</p>	<p>Online Journals by Discipline</p> <p><input type="text" value="Chemistry"/> GO</p>
<p>By Aerospace Subject Categories</p> <p><input type="text" value="Aerodynamics"/> GO</p>	<p>Indian Academic & Research Organizations</p> <p><input type="text" value="Council of Sci & Ind Research"/> GO</p>
<p>Aerospace Journals / Magazines</p> <p><input type="text" value="Aerospace Journals"/> GO</p>	<p>Worldwide Academic & Research Organizations</p> <p><input type="text" value="Titlewise list"/> GO</p>

Other Useful Information

<p>Government and General Sites</p> <p><input type="text" value="Airlines"/> GO</p>	<p>Especially for Librarians</p> <p><input type="text" value="Associations"/> GO</p>	<p>Search Engines / Directories</p> <p><input type="text" value="AltaVista"/> GO</p>
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ICAST

Information Center for Aerospace Science and Technology

[National Aerospace Laboratories](#) [Bangalore](#)

<p style="text-align: center;">ICAST (Library) Information</p> <p><input type="text" value="About ICAST"/> GO</p>	<p style="text-align: center;">ICAST Services</p> <p><input type="text" value="Document Circulation"/> GO</p>
<p style="text-align: center;">Current Awareness Services</p> <p><input type="text" value="Current Awareness"/> GO</p>	<p style="text-align: center;">Access to ICAST Databases</p> <p><input type="text" value="NASA (Full Text)"/> GO</p>

Document: Done

Start | | Welc... | News... | The As... | Aerinf... | Desktop | 10:02 AM